

Name: _____

Date: _____

Making Polymer Putty

Objective: Putty is actually a polymer and it has many uses. Different types of putty are used in the workplace. Plumbers use putty to make a watertight seal around toilet bases and sinks. Tool and die makers also use putty in some machines. Moulders and sculptors work with different types of putty to create art.

Materials:

Safety Goggles

Two 250mL beakers

45mL white glue

105mL of water

15mL of borax

Stirring stick

Graduated cylinder

Procedure:

1. Put on your safety goggles
2. Pour 45mL of glue into a beaker and add 45mL of warm water
3. In the second beaker, add the 15mL borax and 60mL of warm water. Stir for about 2-3 minutes. Note: Do not worry if you find that not all the borax solution dissolves.
4. Using a graduated cylinder, measure 30mL of the borax solution and add it to the glue mixture. Quickly stir the mixture.
5. Remove the material from the beaker
6. Dispose of putty as instructed by your teacher, wash and return all equipment after you have made your observations.

Observations:

1. How did the putty feel?
2. What happens when you pull the putty apart slowly or quickly?
3. Can you bounce the putty?
4. Predict what would happen if you changed the amount of borax used. How do you think this would change the use of the putty?